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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,416	11/04/2003	Susumu Kurita	SONYJP 3.0-347	5820

530 7590 05/25/2006

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EXAMINER

PERVAN, MICHAEL

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/700,416	<b>Applicant(s)</b> KURITA ET AL.	
	<b>Examiner</b> Michael Pervan	<b>Art Unit</b> 2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/1/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: on page 13, lines 13-14, "Fig. 4" should be replaced with --Fig. 5--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5-8, 11-14, 17-20 and 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukushima et al (EP 0,979,003; as submitted by applicant).

In regards to claim 1, Fukushima discloses (Fig. 1) an image display controlling apparatus comprising control signal generating means (26) for generating a control signal for controlling the contrast of a displayed image, in dependence on an input image signal (paragraph 17; the controller (control signal generating means) controls the brightness and contrast depending on the picture appearing on the LCD); level adjustment means (22) for adjusting the level of a luminance signal of said input image signals, based on the control signal supplied from said control signal generating means (paragraphs 17 and 41; picture processor (level adjustment means) is controlled by the controller to adjust the brightness and contrast of the image appearing on the LCD); display means (23a) for demonstrating a displayed image which is in keeping with the level of the luminance signal adjusted by said level adjustment means (paragraphs 18 and 19); illuminating means (23b) for illuminating said display means (paragraph 44); and illumination controlling means (25) for controlling the illumination brightness by said illuminating means, in a correlated fashion with said level adjustment means, based on a control signal supplied from said control signal generating means (paragraphs 44 and 45; back-light controller (illumination controlling means) is controlled by the controller so that the picture appearing on the LCD has proper brightness, contrast and illumination from the back-light).

In regards to claim 2, Fukushima discloses the image display controlling apparatus according to claim 1 wherein, in case of performing the control of lowering the illumination brightness by said illumination controlling means (paragraph 19, lines

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40-45), said level adjustment means makes adjustment for lowering the level of the luminance signal (paragraph 19, lines 40-45).

In regards to claim 5, Fukushima discloses the image display controlling apparatus according to claim 1 further comprising display image generating means (24) for converting a displayed image, which is in keeping with the luminance signal level adjusted by said level adjustment means, into a signal matched to said display means (paragraph 52).

In regards to claim 6, Fukushima discloses the image display controlling apparatus according to claim 1 wherein said display means is a liquid crystal (paragraph 13).

In regards to claims 7, 8, 11 and 12, they claim method steps paralleled to the structural means cited in claims 1, 2, 5 and 6 respectively and are therefore rejected for the same reasons, see MPEP 2112.02 *In re King* ("When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process").

In regards to claim 13, Fukushima discloses (Fig. 1) an imaging apparatus (11) comprising image signal generating means (15) for imaging an object to generate an image signal; control signal generating means (26) for generating a control signal for controlling the contrast of a displayed image responsive to said image signal (paragraph 17; the controller (control signal generating means) controls the brightness and contrast depending on the picture appearing on the LCD); level adjustment means (22) for adjusting the signal level of a luminance signal in said input image signal, based on said

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control signal for controlling the contrast of a displayed image (paragraphs 17 and 41; picture processor (level adjustment means) is controlled by the controller to adjust the brightness and contrast of the image appearing on the LCD); display means (23a) for displaying a displayed image which is in keeping with the signal level of the luminance signal adjusted by said level adjustment means (paragraphs 18 and 19); illuminating means (23b) for illuminating said display means (paragraph 44); and illumination controlling means (25) for controlling the illumination brightness by said illumination means in correlated fashion with said level adjustment means based on said control signal supplied from said control signal generating means (paragraphs 44 and 45; back-light controller (illumination controlling means) is controlled by the controller so that the picture appearing on the LCD has proper brightness, contrast and illumination from the back-light).

In regards to claim 14, Fukushima discloses the imaging apparatus according to claim 13 wherein, in case of performing the control of lowering the illumination brightness by said illumination controlling means (paragraph 19, lines 40-45), said level adjustment means makes adjustment for lowering the level of the luminance signal (paragraph 19, lines 40-45).

In regards to claim 17, Fukushima discloses the imaging apparatus according to claim 13 further comprising display image generating means (24) for converting a displayed image, which is in keeping with the luminance signal level adjusted by said level adjustment means, into a signal matched to said display means (paragraph 52).

In regards to claim 18, Fukushima discloses the imaging apparatus according to claim 13 wherein said display means is a liquid crystal (paragraph 13).

In regards to claim 19, Fukushima discloses (Fig. 1) a viewfinder device (20) for demonstrating an image corresponding to an image signal for monitoring, supplied from an imaging apparatus (11), said viewfinder device comprising control signal generating means (26) for generating a control signal for controlling the contrast of a displayed image, in dependence on the image signal supplied (paragraph 17; the controller (control signal generating means) controls the brightness and contrast depending on the picture appearing on the LCD); level adjustment means (22) for adjusting the level of a luminance signal of said input image signals, based on the control signal supplied from said control signal generating means (paragraphs 17 and 41; picture processor (level adjustment means) is controlled by the controller to adjust the brightness and contrast of the image appearing on the LCD); display means (23a) for demonstrating a displayed image which is in keeping with the level of the luminance signal adjusted by said level adjustment means (paragraphs 18 and 19); illuminating means (23b) for illuminating said display means (paragraph 44); and illumination controlling means (25) for controlling the illumination brightness by said illuminating means, in a correlated fashion with said level adjustment means, based on a control signal supplied from said control signal generating means (paragraphs 44 and 45; back-light controller (illumination controlling means) is controlled by the controller so that the picture appearing on the LCD has proper brightness, contrast and illumination from the back-light).

In regards to claim 20, Fukushima discloses the viewfinder device according to claim 19 wherein, in case of performing the control of lowering the illumination brightness by said illumination controlling means (paragraph 19, lines 40-45), said level adjustment means makes adjustment for lowering the level of the luminance signal (paragraph 19, lines 40-45).

In regards to claim 23, Fukushima discloses the viewfinder device according to claim 19 further comprising displayed image generating means (24) for converting a displayed image, which is in keeping with the luminance signal level adjusted by said level adjustment means, into a signal matched to said display means (paragraph 52).

In regards to claim 24, Fukushima discloses the viewfinder device according to claim 19 wherein said display means is a liquid crystal (paragraph 13).

In regards to claim 25, Fukushima discloses the viewfinder device according to claim 19 wherein said control signal generating means includes a communication function for exchanging the control information with said imaging apparatus (paragraphs 48 and 49); and wherein the viewfinder device makes an inquiry to said imaging apparatus as to whether or not the imaging apparatus has a function of controlling the illumination brightness by said illuminating means in correlated fashion with the function of controlling the contrast of the display image and/or the function of controlling the contrast.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:



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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 4, 9, 10, 15, 16, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukushima in view of Isogawa et al (US 6,466,196; as submitted by applicant).

In regards to claim 3, Fukushima does not disclose the image display controlling apparatus according to claim 1 wherein said illuminating means sets a lower limit of said illumination brightness in dependence on a value of the stable discharge current in said illuminating means.

Isogawa discloses the image display controlling apparatus according to claim 1 wherein said illuminating means sets a lower limit of said illumination brightness in dependence on a value of the stable discharge current in said illuminating means (col. 1, line 55-col. 2, line 16).

It would have been obvious at the time of invention to modify Fukushima by incorporating the teachings of Isogawa because it prevents the illuminating means (fluorescent tube) from reaching a discharge state that is insufficient to cause a uniform fluorescence (col. 2, lines 9-12).

In regards to claim 4, Fukushima does not disclose the image display controlling apparatus according to claim 3 wherein said level adjustment means adjusts the luminance signal level in a lowering direction in case said illumination controlling means has controlled the illumination brightness to a lower limit value.

Isogawa discloses the image display controlling apparatus according to claim 3 wherein said level adjustment means adjusts the luminance signal level in a lowering direction in case said illumination controlling means has controlled the illumination brightness to a lower limit value (col. 2, lines 17-41; the pulse width's (luminance signal) frequency has been lowered to allow for brightness levels beyond the limited range).

It would have been obvious at the time of invention to modify Fukushima by incorporating the teachings of Isogawa because it allows the brightness to be adjusted over a wider range, which in turn allows for more versatility, in that the device can be used in a greater range of ambient light (col. 2, lines 22-25).

In regards to claims 9 and 10, they claim method steps paralleled to the structural means cited in claims 3 and 4 respectively and are therefore rejected for the same reasons, see MPEP 2112.02 *In re King* ("When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process").

In regards to claim 15, Fukushima does not disclose the imaging apparatus according to claim 13 wherein said illuminating means sets a lower limit of said illumination brightness in dependence on a value of the stable discharge current in said illuminating means.

Isogawa discloses the imaging apparatus according to claim 13 wherein said illuminating means sets a lower limit of said illumination brightness in dependence on a value of the stable discharge current in said illuminating means (col. 1, line 55-col. 2, line 16).

It would have been obvious at the time of invention to modify Fukushima by incorporating the teachings of Isogawa because it prevents the illuminating means (fluorescent tube) from reaching a discharge state that is insufficient to cause a uniform fluorescence (col. 2, lines 9-12)

In regards to claim 16, Fukushima does not disclose the imaging apparatus according to claim 15 wherein said level adjustment means adjusts the luminance signal level in a lowering direction in case said illumination controlling means has controlled the illumination brightness to a lower limit.

Isogawa discloses the imaging apparatus according to claim 15 wherein said level adjustment means adjusts the luminance signal level in a lowering direction in case said illumination controlling means has controlled the illumination brightness to a lower limit (col. 2, lines 17-41; the pulse width's (luminance signal) frequency has been lowered to allow for brightness levels beyond the limited range).

It would have been obvious at the time of invention to modify Fukushima by incorporating the teachings of Isogawa because it allows the brightness to be adjusted over a wider range, which in turn allows for more versatility, in that the device can be used in a greater range of ambient light (col. 2, lines 22-25).

In regards to claim 21, Fukushima does not disclose the viewfinder device according to claim 19 wherein said illuminating means sets a lower limit of said illumination brightness in dependence on a value of the stable discharge current in said illuminating means.

Isogawa discloses the viewfinder device according to claim 19 wherein said illuminating means sets a lower limit of said illumination brightness in dependence on a value of the stable discharge current in said illuminating means (col. 1, line 55-col. 2, line 16).

It would have been obvious at the time of invention to modify Fukushima by incorporating the teachings of Isogawa because it prevents the illuminating means (fluorescent tube) from reaching a discharge state that is insufficient to cause a uniform fluorescence (col. 2, lines 9-12)

In regards to claim 22, Fukushima does not disclose the viewfinder device according to claim 21 wherein said level adjustment means adjusts the luminance signal level in a lowering direction in case said illumination controlling means has controlled the illumination brightness to a lower limit.

Isogawa discloses the viewfinder device according to claim 21 wherein said level adjustment means adjusts the luminance signal level in a lowering direction in case said illumination controlling means has controlled the illumination brightness to a lower limit (col. 2, lines 17-41; the pulse width's (luminance signal) frequency has been lowered to allow for brightness levels beyond the limited range).

It would have been obvious at the time of invention to modify Fukushima by incorporating the teachings of Isogawa because it allows the brightness to be adjusted over a wider range, which in turn allows for more versatility, in that the device can be used in a greater range of ambient light (col. 2, lines 22-25).

### ***Conclusion***

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art (Katada US 5,933,089) is deemed relevant since it discusses adjusting the contrast corresponding to the received light quantity of the LCD detected by a light sensor. Prior art (Miller et al US 6,411,306) is deemed relevant since it discusses continual adjustment of the luminance and contrast of a display unit according to changing lighting conditions.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pervan whose telephone number is (571) 272-0910. The examiner can normally be reached on Monday - Friday between 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MVP  
May 18, 2006



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